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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/988,653  
Filing Date: November 20, 2001  
Appellant(s): Kazuhiko Isoyama

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Marshall M. Curtis  
For Appellant

## **EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 04, 2007 appealing from the Office action mailed August 22, 2006.

### **(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

### **(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### **(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

### **(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### **(5) Summary of Claimed Subject Matter**

The summary of invention contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

- Hultgren, (6,134,589) issued on October 17, 2000.
- Feinberg, (6,798,745) issued on September 28, 2004.
- Nag et al., (2006/0056298) issued on March 16, 2006.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hultgren, U.S. Patent No. 6,134,589 (hereinafter Hultgren), in view of Feinberg, U.S. Patent No. 6,798,745 (hereinafter Feinberg), and further in view of

Nag et al., U.S. Patent Application Publication No. 2006/0056298 (hereinafter Nag).

2. With respect to claims 1, 4, 6, 37, 40, and 42, Hultgren teaches a QoS server [20 i.e. QSC server], which is used in a network system [see abstract] comprising:

a network, main signal gateways [24T i.e. a plurality of intermediate telephony nodes] for accommodating outside networks in the network and executing conversion of main signals between the network and the outside networks [fig.1], a call setup server for setting up a call [col.2, ln.52 - col.3, ln.61], and signaling gateways for executing conversion of signaling signals between the call setup server and the outside networks [figs.1-2], including:

a network monitoring section for monitoring the network state [col.5, lns.9-56];

a network state database [85 i.e. link current status database] for storing network state information obtained at the network monitoring section [see table 2];

a resource allocation computing section [i.e. connection parameter table, see table 4] for computing resource allocation information for applications based on resource requirements with reference to the network state information [col.10, ln.5 - col.11, ln.57];

a resource allocation database [84 i.e. route map database] for storing resource allocation information [col.5, ln.9 - col.6, ln.67 and see table 1]; and

a network setup section [83 i.e. session database] for setting up resource allocation on the network based on the resource allocation information [fig.2].

However, Hultgren does not explicitly show a network monitoring section for monitoring the network state and a resource allocation computing section for computing resource allocation information, including failures and received signal quality.

In a communication system, Feinberg suggests a network monitoring section for monitoring the network state [i.e. monitors QoS parameters may include packet loss, .. and excessive network delay and/or jitter, col.4, lns.20-67] and a resource allocation computing section for computing resource allocation information [i.e. process QoS data to determine QoS parameter value, fig.3], including failures [i.e. packet loss] and received signal quality [i.e. delay and/or jitter].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hultgren in view of Feinberg by including failures and received signal quality because this feature are able to provide guaranteed QoS to establish connections [Feinberg, col. 1, lns.21-29]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to an acceptable range of QoS values [Feinberg, col.1, lns.61-62].

Further, Hultgren in view of Feinberg do not explicitly show setting up resource allocation on the network based on an aggregate of calls and the resource allocation information.

In a pre-allocation network, Nag discloses setting up resource allocation on the network based on an aggregate of calls and the resource allocation information [i.e. media aggregation manager 300 is provided for multiplexing several application flows over a pre-allocated reservation, paragraph 0053-0055].

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hultgren in view of Feinberg, and further in view of Nag by setting up resource allocation on the network based on an aggregate of calls and the resource allocation information because this feature reduces the computational resources requires by the network [Nag, paragraph 0053]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to provide reserved bandwidth, e.g., guaranteed bandwidth, for multiple application flows [Nag, paragraph 0053].

3. With respect to claims 2 and 38, Hultgren further teaches resource allocation is conducted based on the resource requirements from a resource requiring section that makes resource requirements located in the call setup server [col.7, ln.29 - col.8, ln.65].

4. With respect to claims 3 and 39, Hultgren further teaches resource allocation is conducted based on the resource requirements from a resource requiring section that makes resource requirements located in the main signal gateway [col.7, ln.29 - col.8, ln.65].
5. With respect to claims 7-12 and 43-48, Hultgren further teaches previously obtains traffic requirements and resource requirements to compute path and resource allocation, and conducts path and resource allocation before a call arrives on the network [col.1, ln.53 -col.2, ln.16 and col.7, ln.29 - col.8, ln.65].
6. With respect to claims 13-18 and 49-54, Hultgren further teaches obtains traffic requirements and resource requirements of calls to compute path and resource allocation for an aggregate of calls, and conducts path and resource allocation [fig.5].
7. With respect to claims 19-24 and 55-60, Hultgren further teaches obtains traffic requirements and resource requirements of additional aggregate calls, when the number of connected calls exceeds a certain threshold, to re-compute path and resource allocation, and renews the threshold after additional path and resource allocation [col.10, ln.20 - col.12, ln.2].



8. With respect to claims 25-30 and 61-66, Hultgren further teaches obtains a request for resource release for aggregate calls when the number of connected calls underruns a certain threshold, and renews the threshold after resource release [col.7, ln.29 - col.8, ln.48].

9. With respect to claims 31-36 and 67-72, Hultgren further a user information database [82 i.e. customer database] for storing the resource requirements, which monitors traffic flow corresponding to the allocated resources [col.12, lns.13-41 and col.13, ln.17 - col.14, ln.27], and when detecting that the required quality is not satisfied, re-computes path and resource allocation with reference to the user information database to alter path and resource allocation [col.6, ln.5 - col.8, ln.65].

10. With respect to claims 5 and 41, Hultgren further teaches resource allocation is conducted based on the resource requirements from a resource requiring section that makes resource requirements located in the policy server [col.4, ln.10 - col.5, ln.56].

#### **(10) Response to Argument**

In the remarks, applicant argued in substance that

- I. **Hultgren does not disclose the network state monitoring including failure and received signal quality.**

In response to Appellant's argument that Hultgren does not disclose the network state monitoring including failure and received signal quality, the Examiner respectfully disagrees. First, Appellant obviously attacks references individually without taking into consideration based on the teaching of combinations of Hultgren in view of Feinberg. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merch & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Second, Hultgren teaches a network monitoring section for monitoring the network states including received signal quality [col.5, ll.24-56]. For example, Hultgren discloses measuring and monitoring connection performance [col.5, ll.30-31]. Further, Hultgren discloses QSC server explores what better connections can be offered, col.5, ll.24-56. Third, the examiner admits that Hultgren does not explicitly show monitoring the network state including failures. In a communication system, Feinberg discloses monitoring the network state including failure [= packet loss, col.4, ll.20-67 and fig.3]. Therefore, Hultgren in view of Feinberg discloses claimed feature as show in the above.

**II. Hultgren does not disclose a network state database for storing network state information obtained at the network monitoring section.**

In response to Appellant's argument that Hultgren does not disclose a network state database for storing network state information obtained at the network monitoring section, the Examiner respectfully disagrees. Hultgren disclose a network state database [= link current status database 85] for storing network state information obtained at the network monitoring section [col.8, ll.49 through col.9, ll.25 and see tables2-3].

**III. Nag et al. does not disclose any technique for dynamic adjustment of pre-allocated resources.**

In response to Appellant's argument that Nag et al. does not disclose any technique for dynamic adjustment of pre-allocated resources, the Examiner respectfully disagrees. Applicant's argument does not commensurate with the scope of the claim. The claims 1, 6, 11, and 16 only recite the limitation of a resource allocation computing section for computing resource allocation information. However, claims 1, 6, 11, and 16 do not recite the limitation of dynamic adjustment of pre-allocated resources (emphasis added). Therefore, Nag discloses setting up

resource allocation on the network based on an aggregate of calls and the resource allocation information [= media aggregation manager 300 is provided for multiplexing several application flows over a pre-allocated reservation, paragraph 0053-0055].

**IV. Nag et al. does not disclose processing in regard to resource allocation in response to QoS events monitored.**

In response to Appellant's argument that Nag et al. does not disclose processing in regard to resource allocation in response to QoS events monitored, the Examiner respectfully disagrees. First, Appellant obviously attacks references individually without taking into consideration based on the teaching of combinations of Hultgren in view of Feinberg. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merch & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Second, Hultgren teaches a network monitoring section for monitoring the network states including received signal quality [col.5, ll.24-56]. For example, Hultgren discloses measuring and monitoring connection performance [col.5, ll.30-31]. Third, the examiner admits that Hultgren does not explicitly show monitoring the network state including failures. In a communication system, Feinberg discloses monitoring the network state including failure

[= packet loss, col.4, ll.20-67 and fig.3]. Further, Nag discloses setting up resource allocation on the network based on an aggregate of calls and the resource allocation information [= media aggregation manager 300 is provided for multiplexing several application flows over a pre-allocated reservation, paragraph 0053-0055]. Therefore, Hultgren in view of Feinberg, and further in view of Nag discloses claimed feature as show in the above.

- V. The examiner has relied on hindsight in the improper combination of the references relied upon as well as on hindsight in regard to individual elements or steps recited in the claims which are not, in fact, answered by the scope and content of the references, the actual scope and content of which prior art falls far short of supporting the conclusion of obviousness that the examiner has asserted and which precludes a prima facie demonstration of obviousness from properly being made.**

In response to Appellant's argument that a prima facie case for obviousness has not been established under 35 U.S.C. 103(a) over Hultgren in view of Feinberg, and further in view of Nag, the examiner respectfully disagree. The examiner recognizes that obviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching,

suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hultgren in view of Feinberg by including failures and received signal quality because this feature is being able to provide guaranteed QoS to establish connections [Feinberg, col.1, ll.21-29]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to accept range of QoS values [Feinberg, col.1, Ins.61-62]. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hultgren in view of Feinberg, and further in view of Nag by setting up resource allocation on the network based on an aggregate of calls and the resource allocation information because this feature reduces the computational resources requires by the network [Nag, paragraph 0053]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to provide reserved bandwidth, e.g., guaranteed bandwidth, for multiple application flows [Nag, paragraph 0053].

None

**(12) Related Proceedings Appendix**

None

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Nghi V. Tran

January 05, 2008

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151

**Conferee:**

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